

Fig. 1

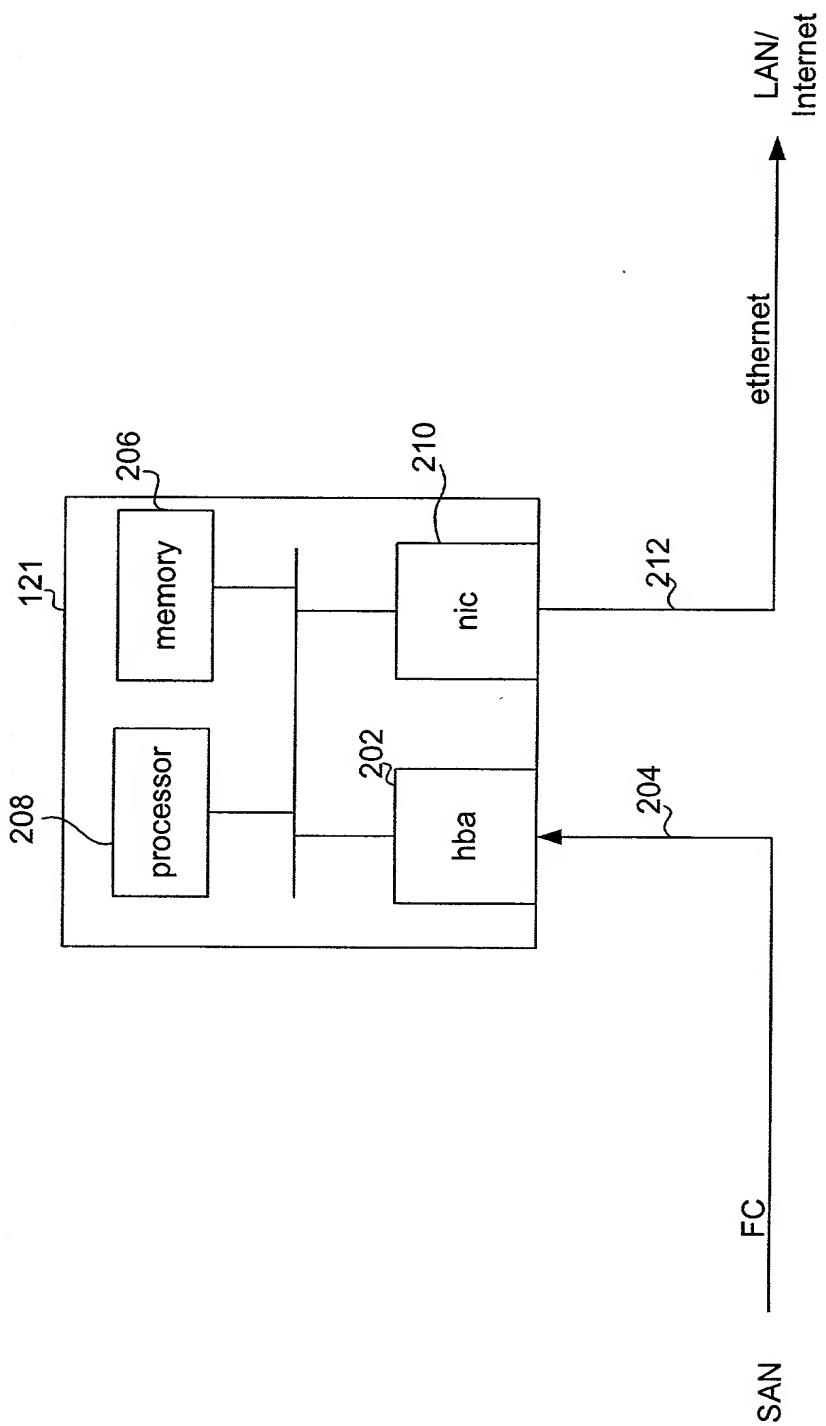


Fig. 2

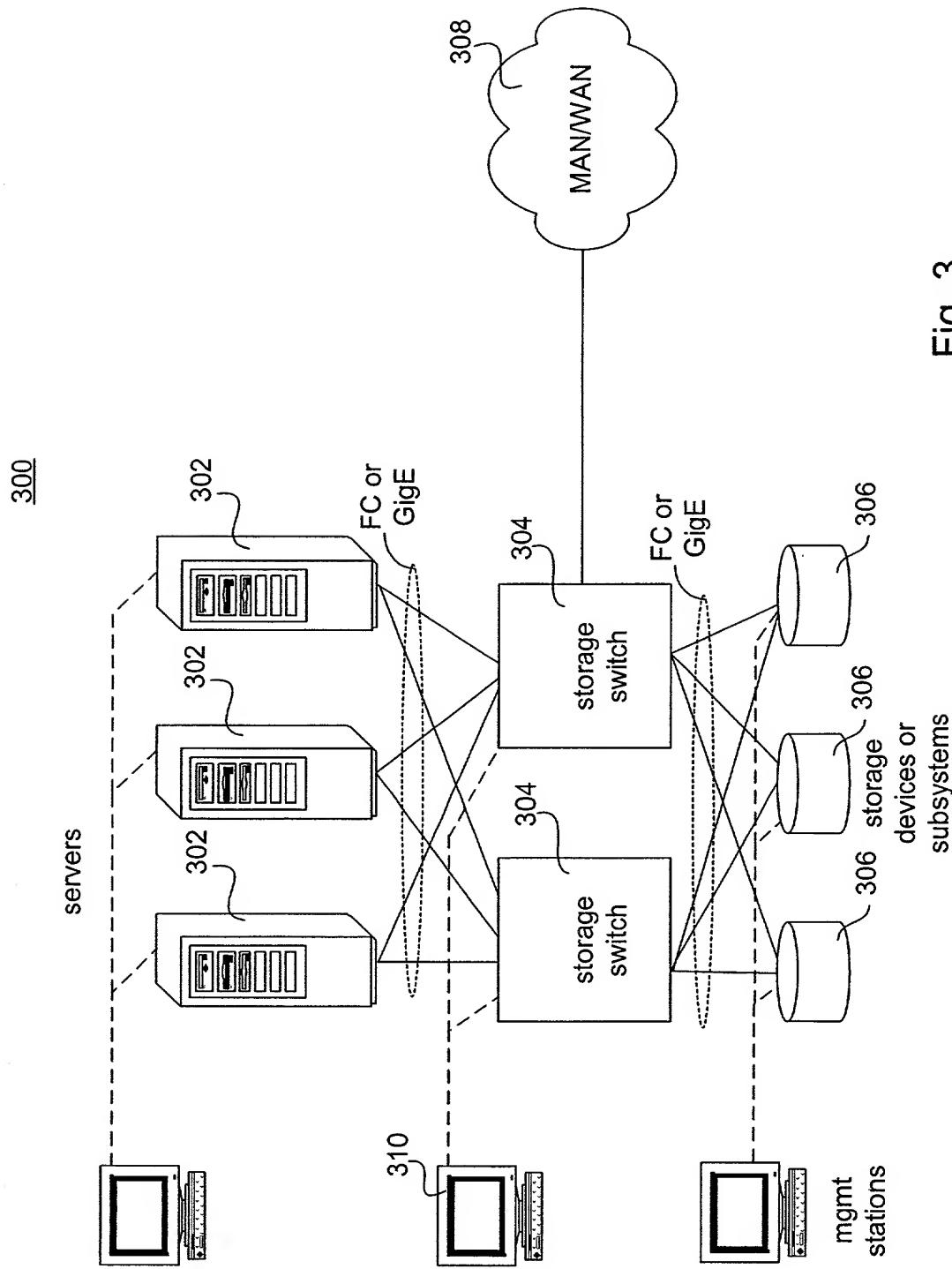


Fig. 3

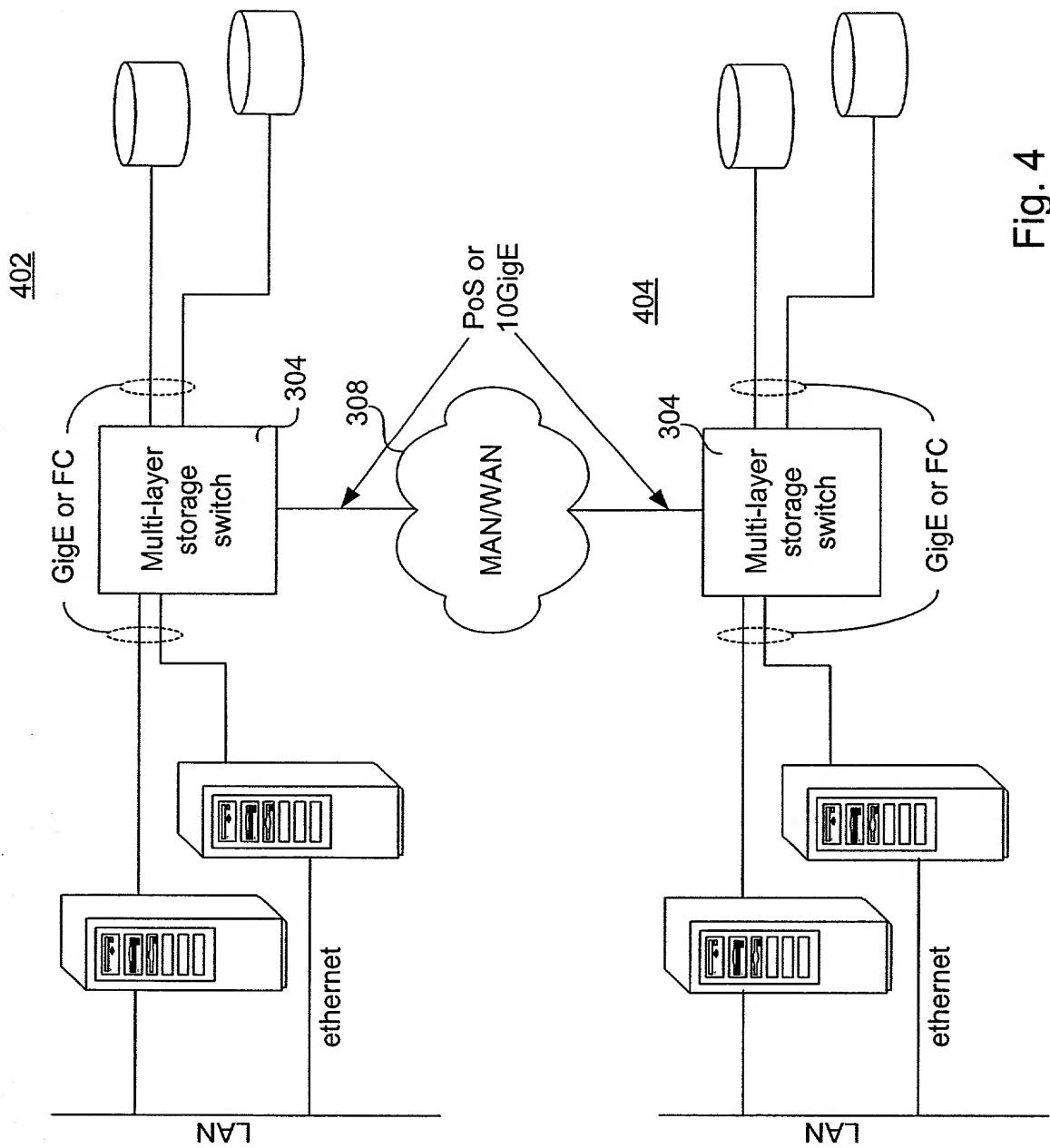
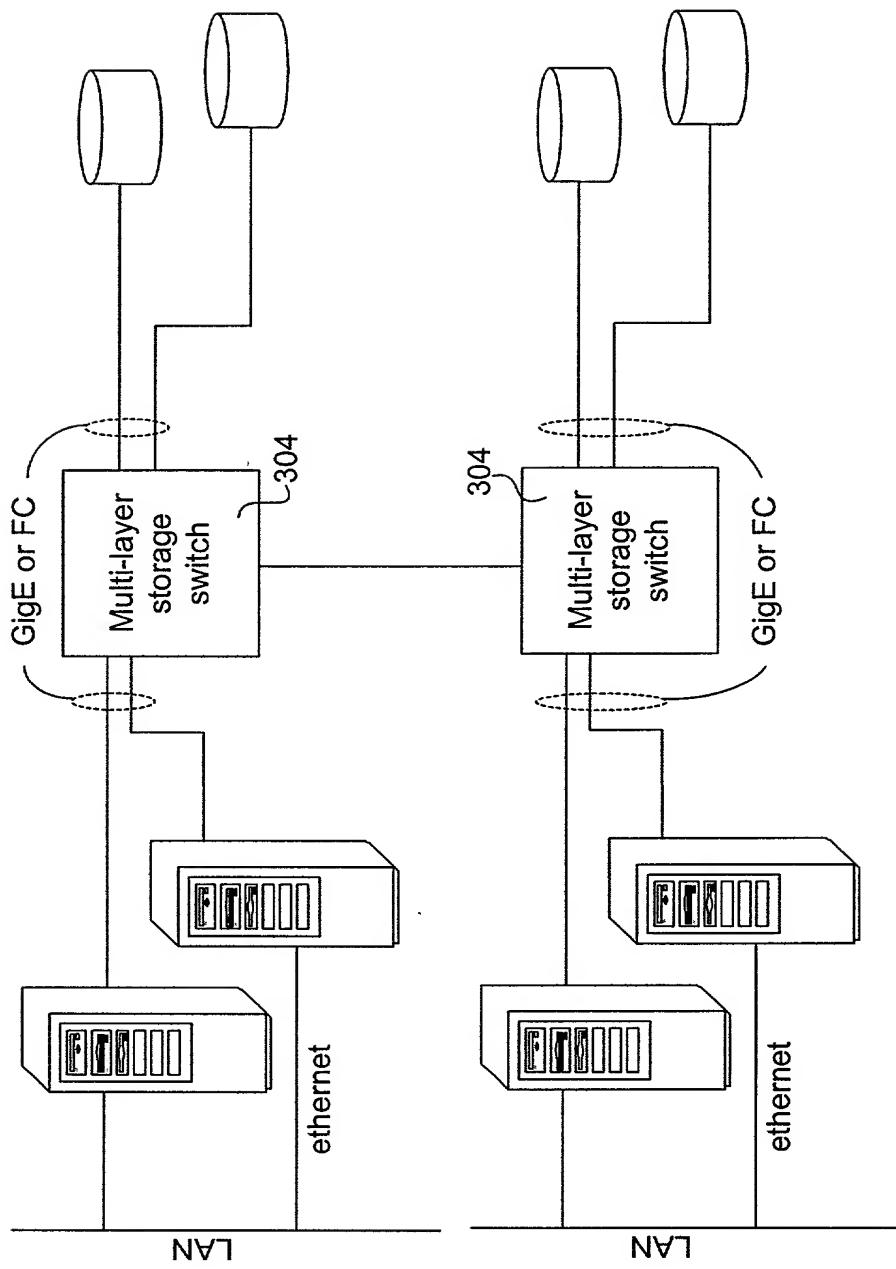


Fig. 4

Fig. 5



304

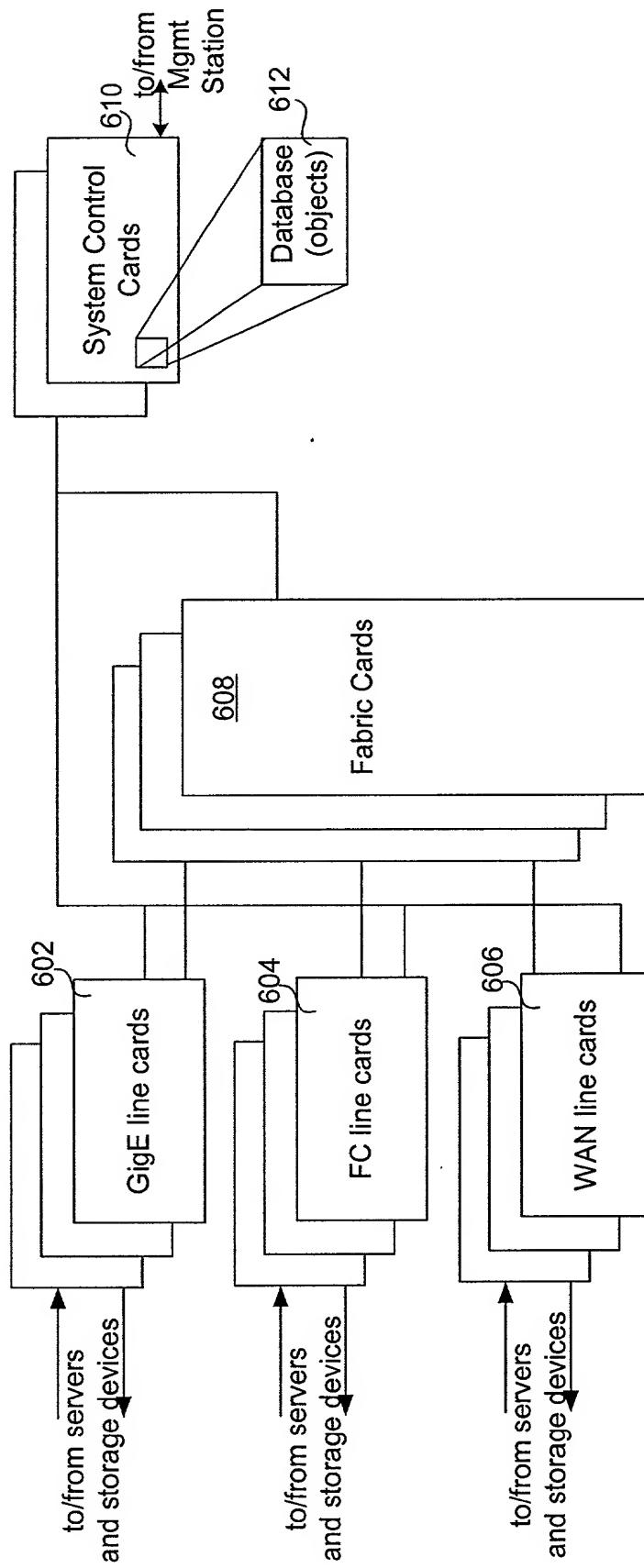


Fig. 6

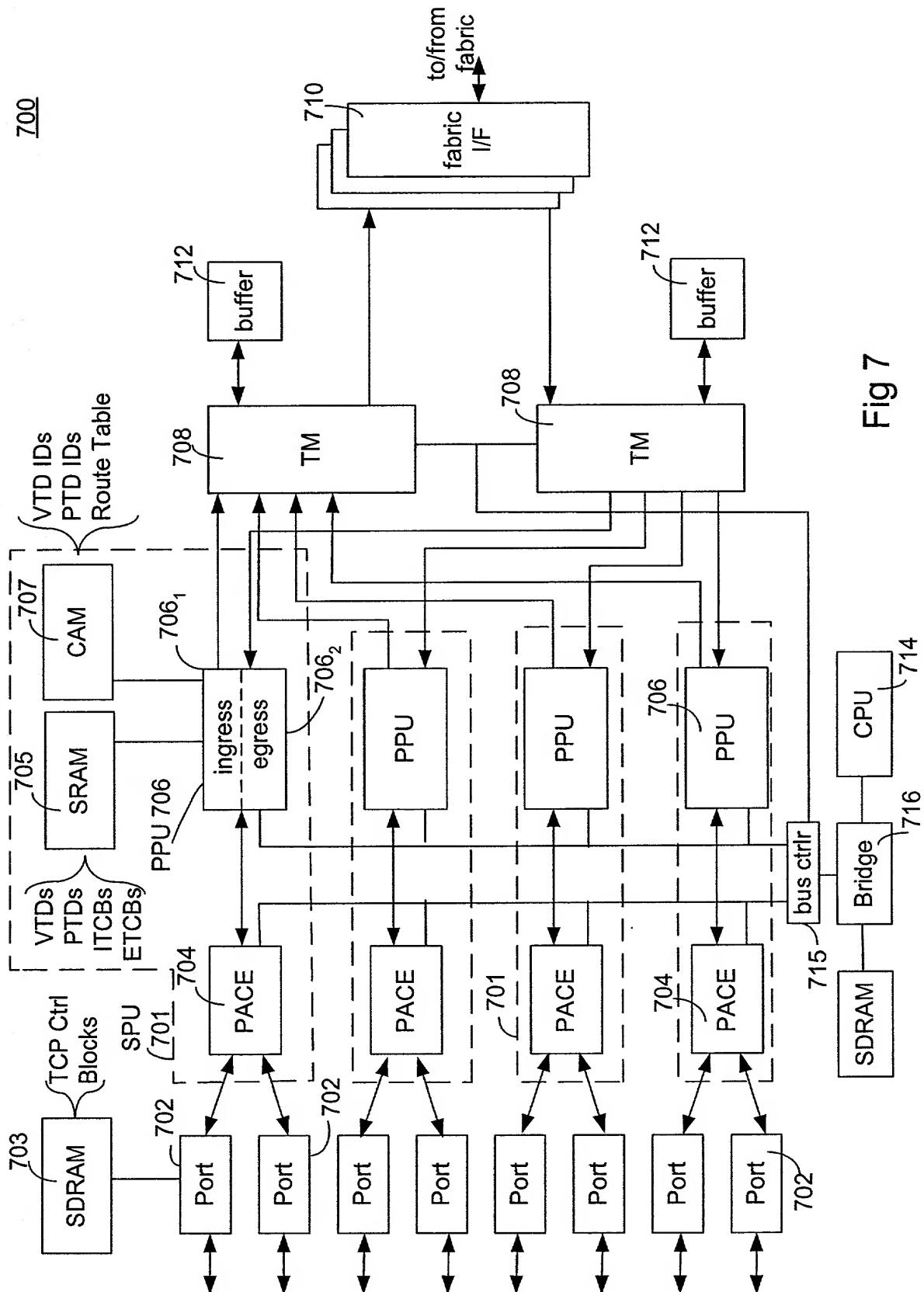


Fig 7

Fig. 7a

VTD
VTD ID
FlowID
Extent Descriptors (e.g., size, location)
of outstanding commands
Max # of commands
Response time
LUN
TCP control block index
S_IDD_ID
MaxCmdSN
Total open sequences

Byte	Byte 0	Byte 1	Byte 2	Byte 3
0	X I	0x01	FRW 00 ATTR	Rsvd
4	TotalAHSLength	DataSegmentLength		CRN or Rsvd
8	Logical Unit Number (LUN)			
16	Initiator Task Tag			
20	Expected Data Transfer Length			
24	CmdSN			
28	ExpStatSN or ExpDataSN			
32				
36	SCSI Command Descriptor Block (CDB)			
40				
44				
48				

iSCSI Command PDU

Fig. 8a

Byte	Byte 0	Byte 1	Byte 2	Byte 3
0	1 1	0x31	1	Rsvd (0)
4				Rsvd (0)
8				
16	Initiator Task Tag			
20	Target Transfer Tag			
24	StatSN			
28	ExpCmdSN			
32	MaxCmdSN			
36	R2TSN			
40	Buffer Offset			
44	Desired Data Transfer Length			
48				

iSCSI R2T PDU

Fig. 8b

Byte	Byte 0	Byte 1	Byte 2	Byte 3
0	0 0	0x05	F	Rsvd (0)
4	Rsvd (0)			DataSegmentLength
8	LUN or Reserved (0)			
16				
20	Initiator Task Tag			
24	Target Transfer Tag or 0xffffffff			
28	Rsvd (0)			
32	ExpCmdSN			
36	Rsvd (0)			
40	DataSN			
44	Buffer Offset			
48	Rsvd (0)			
	Data			

iSCSI Write Data PDU

Fig. 8c

Byte	Byte 0	Byte 1	Byte 2	Byte 3
0	1 1	0x25	F	O U S Rsvd (0) Status or Rsvd
4	Rsvd (0)			DataSegmentLength
8	Rsvd (0)			
16				
20	Initiator Task Tag			
24	Rsvd (0)			
28	StatSN or Rsvd (0)			
32	ExpCmdSN			
36	MaxCmdSN			
40	DataSN			
44	Buffer Offset			
48	Residual Count			
	Data			

iSCSI Read Data PDU

Fig. 8d

	Byte 0	Byte 1	Byte 2	Byte 3	
0	1 1 0x21	1 rsv 0 u 0 u 0	Status	Response	
4	Rsvd (0)	DataSegmentLength			
8	Rsvd (0)				
16	Initiator Task Tag				
20	Basic Residual count				
24	StatSN				
28	ExpCmdSN				
32	MaxCmdSN				
36	ExpDataSN or Rsvd (0)				
40	ExpR2TSN or Rsvd (0)				
44	Bidi-Read Residual Count				
48	Sense Data and Response Data (optional)				

iSCSI Response PDU

Fig. 8e

Bits Word	31-24	23-16	15-08	07-00
0	R_CTL		D_ID	
1	rsvd		S_ID	
2	TYPE		F_CTL	
3	SEQ_ID	DF_CTL	SEQ_CNT	
4		OX_ID	RX_ID	
5		RLTV_OFF		

FC Frame Header
Fig. 8f

Field Name	Description	Size
FCP_LUN	logical unit number	8 bytes
FCP_CNTL	control field	4 bytes
FCP_CDB	SCSI command descriptor block	16 bytes
FCP_DL	Data Length	4 bytes

FCP_CMND Payload
Fig. 8g

Field Name	Description	Size
DATA_RO	Relative offset of first byte of FCP_DATA IU that follows	4 bytes
BURST_LEN	length of FCP_DATA IU that follows	4 bytes
rsvd		4 bytes

FCP_XFR_RDY Payload
Fig. 8h

Field Name	Description	Size
rsvd		4 bytes
rsvd		4 bytes
FCP_STATUS	field validity and SCSI status	4 bytes
FCP_RESID	residual count	4 bytes
FCP_SNS_LEN	Length of FCP_SNS_INFO field	4 bytes
FCP_RSP_LEN	Length of FCP_RSP_INFO field	4 bytes
FCP_RSP_INFO	FCP response info	m bytes
FCP_SNS_INFO	FCP sense info	n bytes

FCP_RSP Payload
Fig. 8i

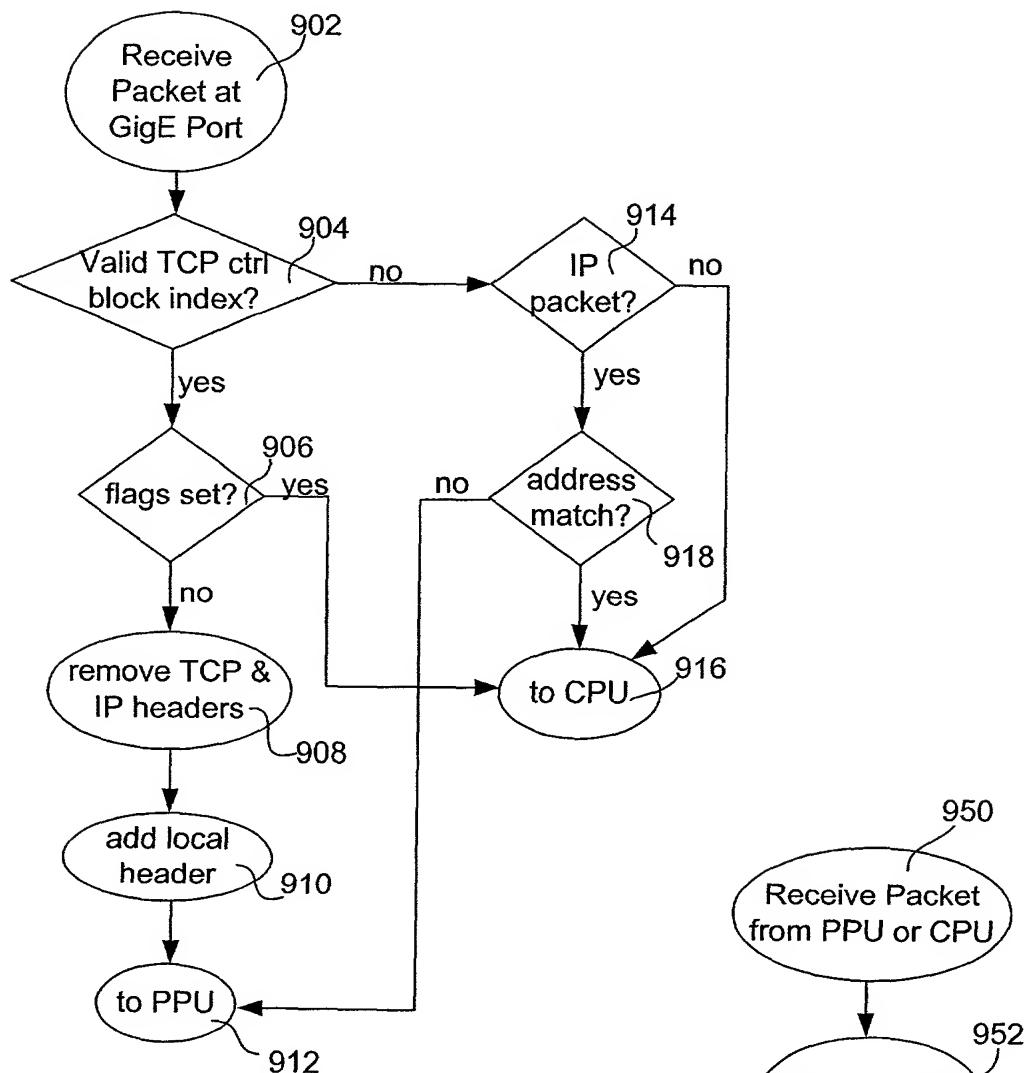
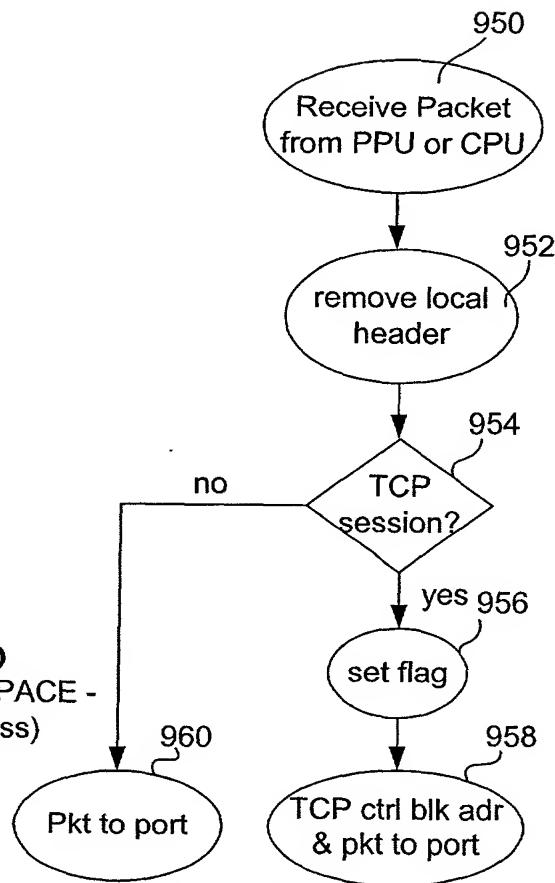


Fig 9a

(Classification - PACE - iSCSI - ingress)

Fig 9b
(Classification - PACE - iSCSI - egress)

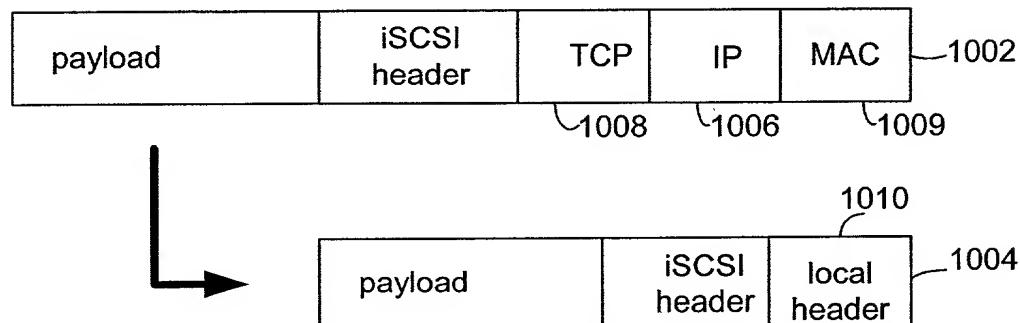


Fig. 10a

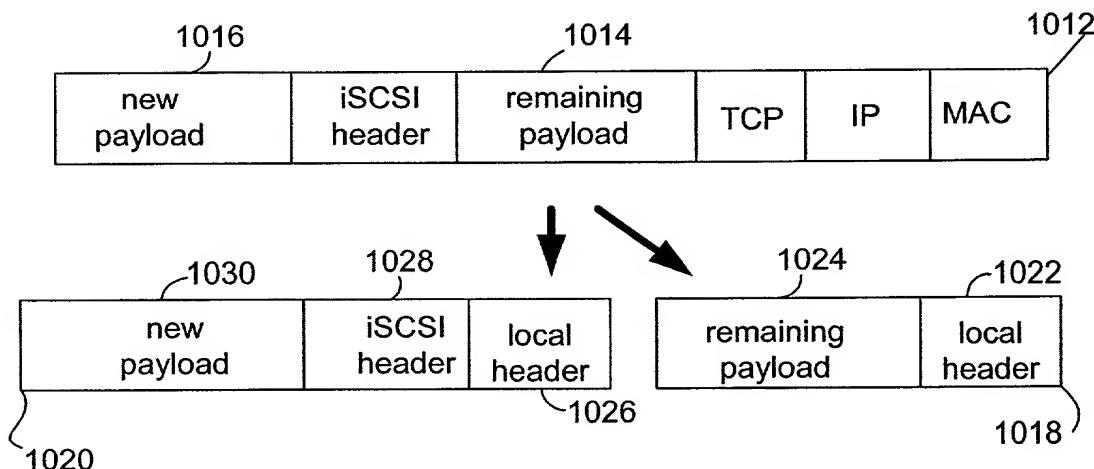


Fig. 10b

1100

Local Header

VTD ID
FlowID
TCP Control Block Index
Type
Size
Task Index
Source (Port, PACE, Linecard, CPU)
Destination (Port, PACE, Linecard,
CPU)

Fig. 11

1005164 011302

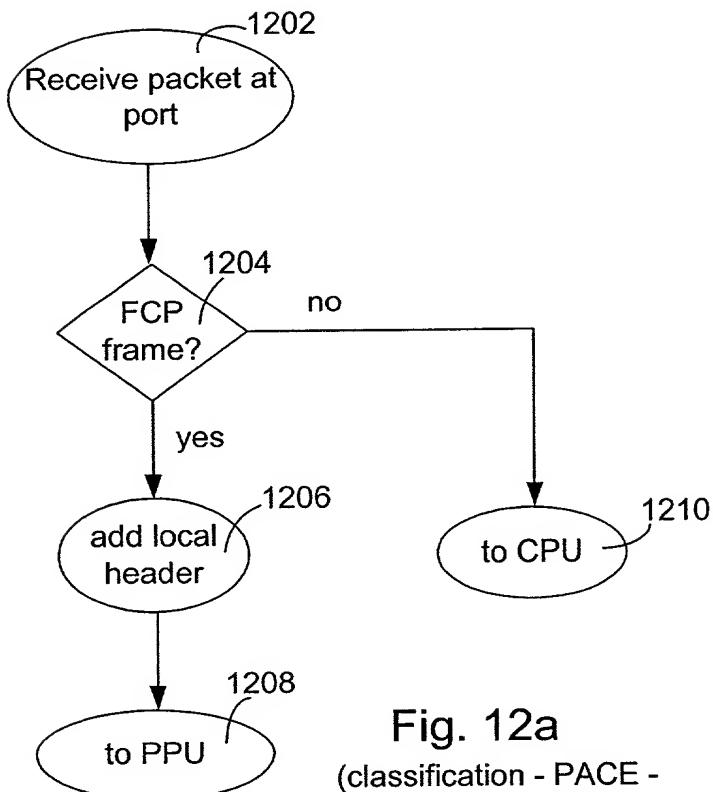


Fig. 12a
(classification - PACE -
FCP - ingress)

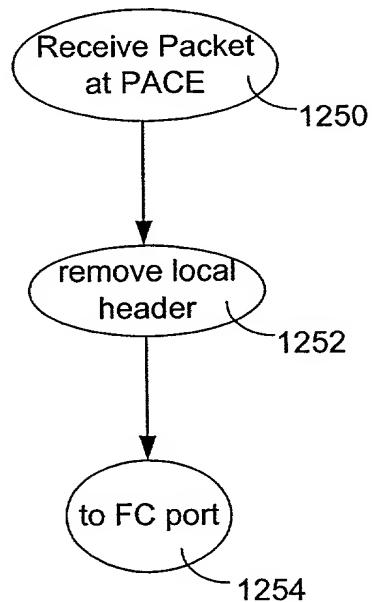


Fig. 12b
(classification - PACE -
FCP - egress)

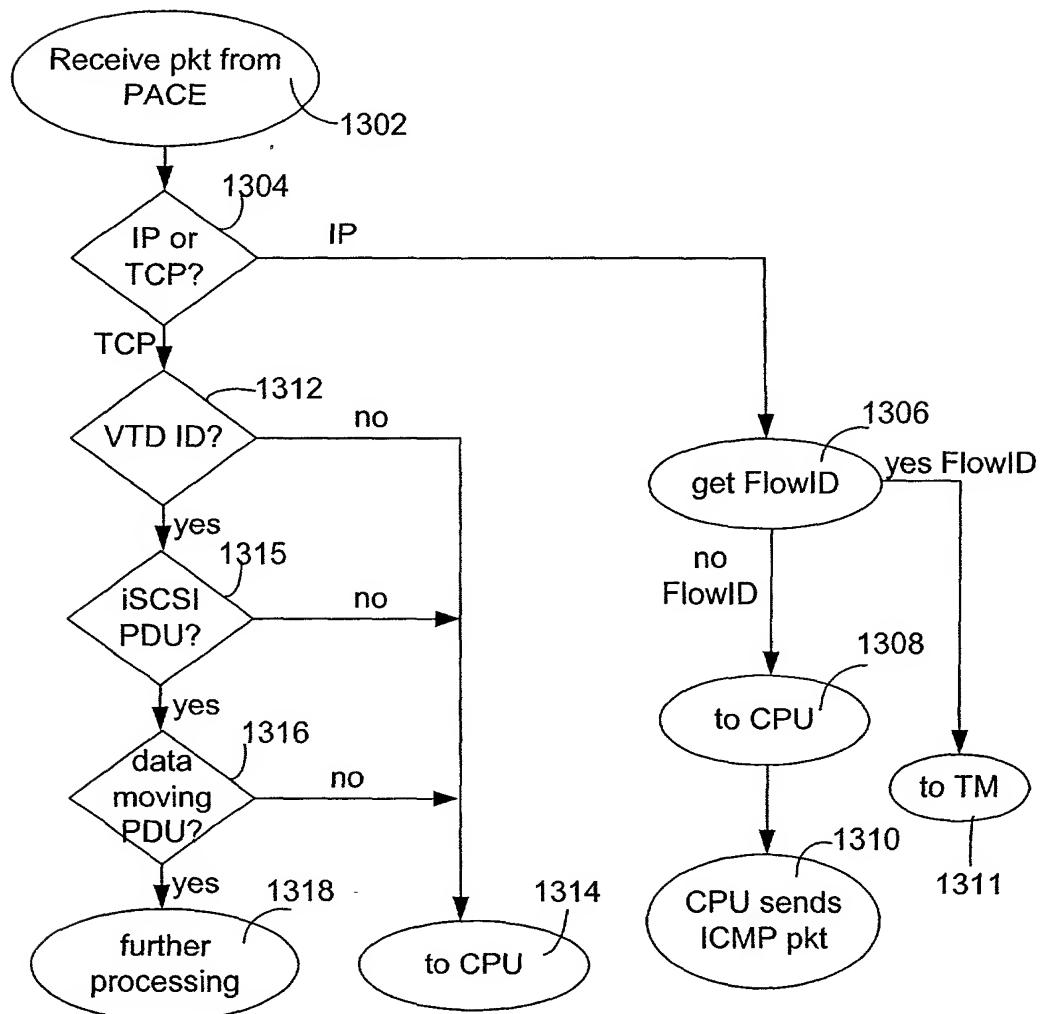


Fig. 13a
(Classification - PPU -
ingress)

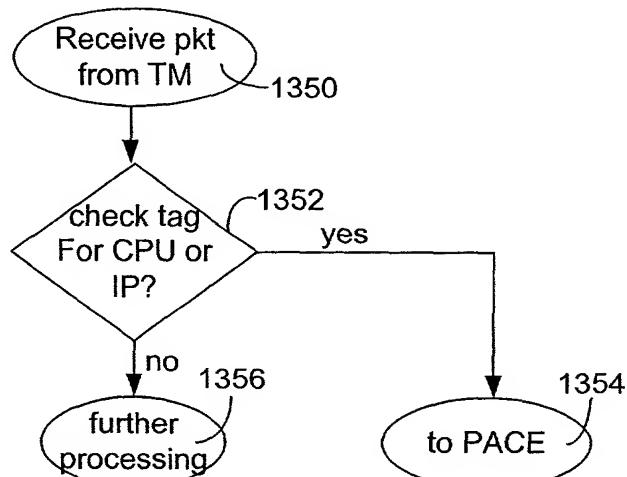


Fig. 13b
(Classification - PPU -
egress)

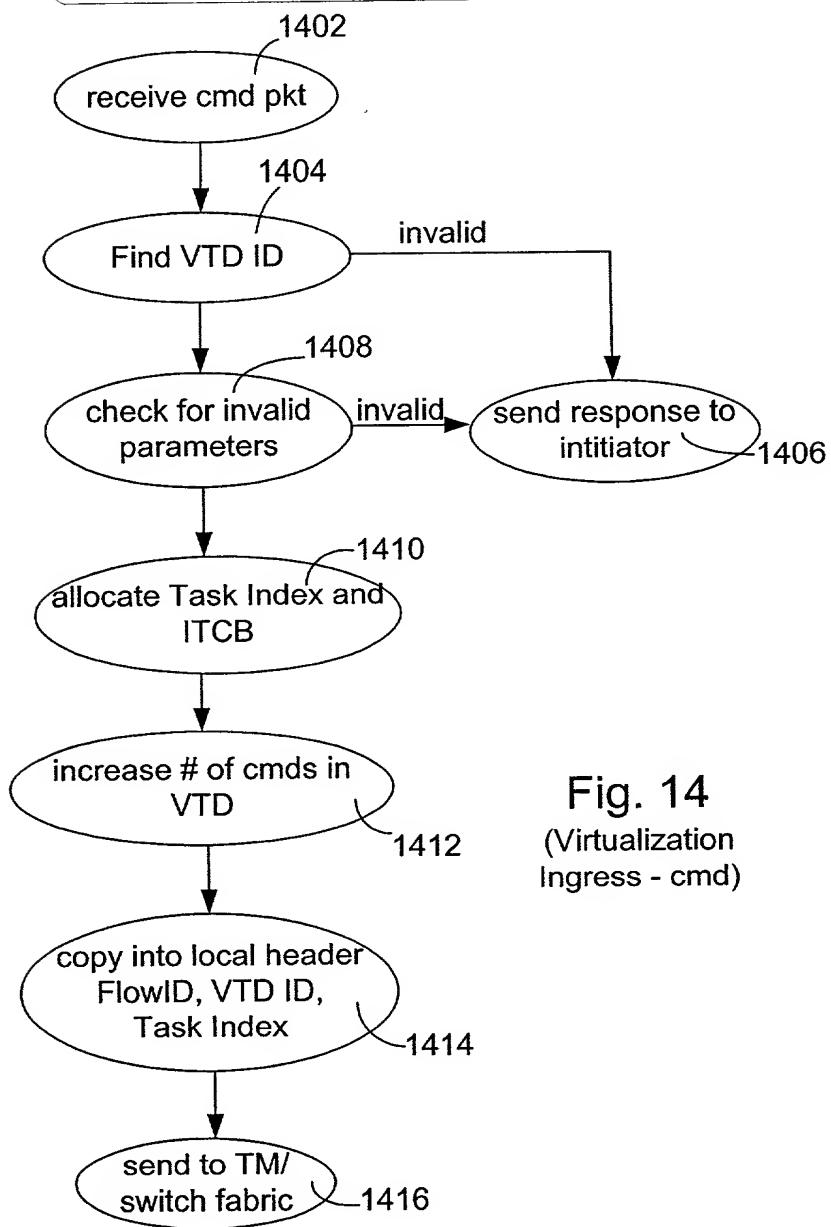


Fig. 14
(Virtualization
Ingress - cmd)

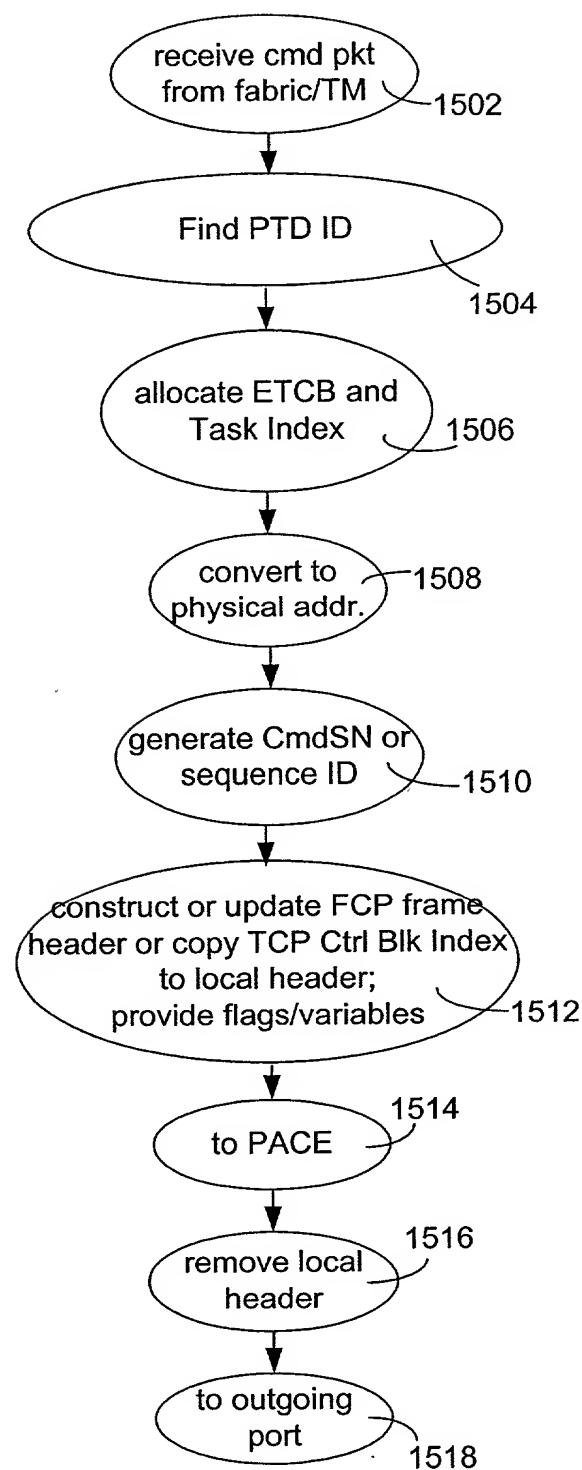
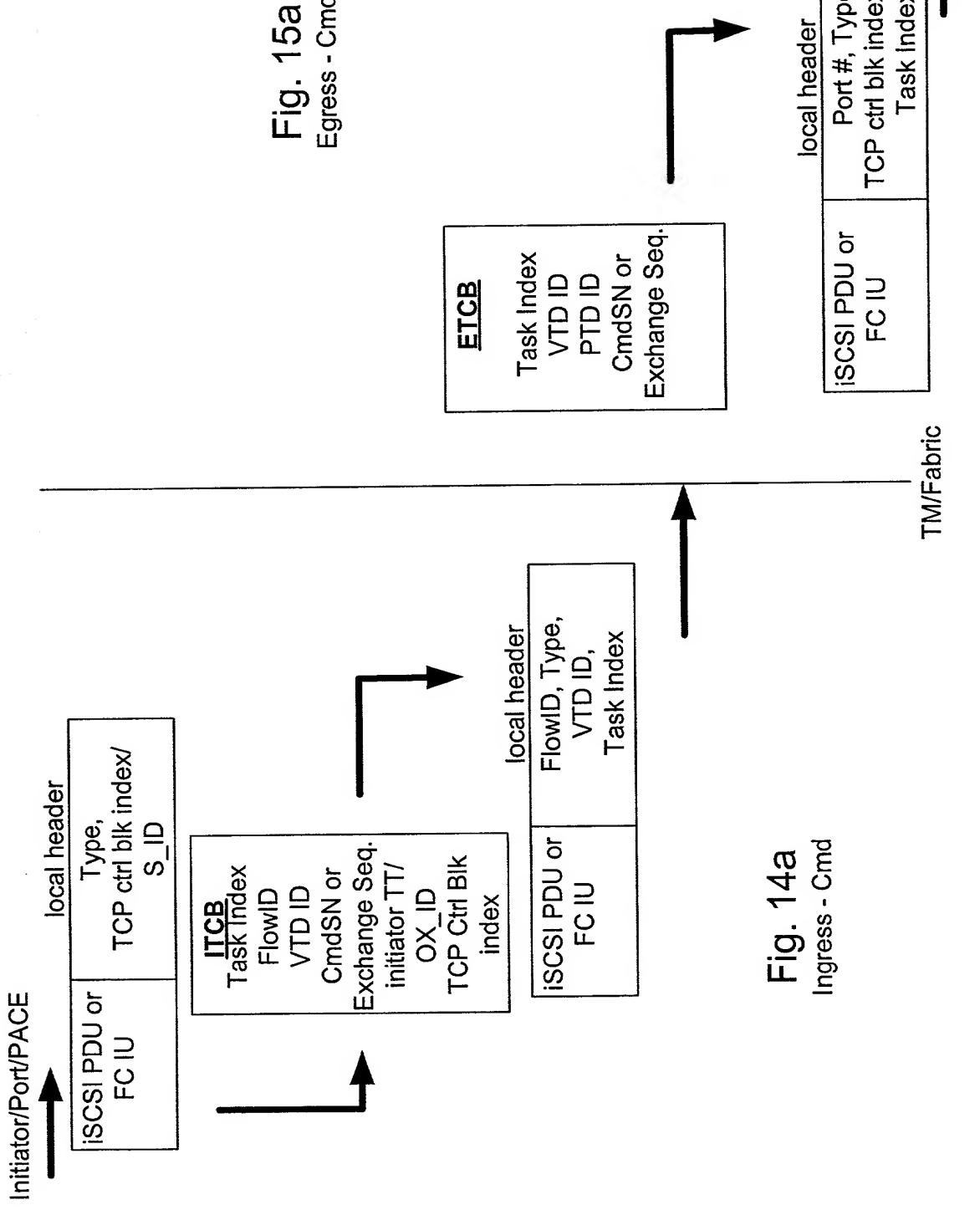


Fig. 15
(Virtualization -
Egress - cmd)



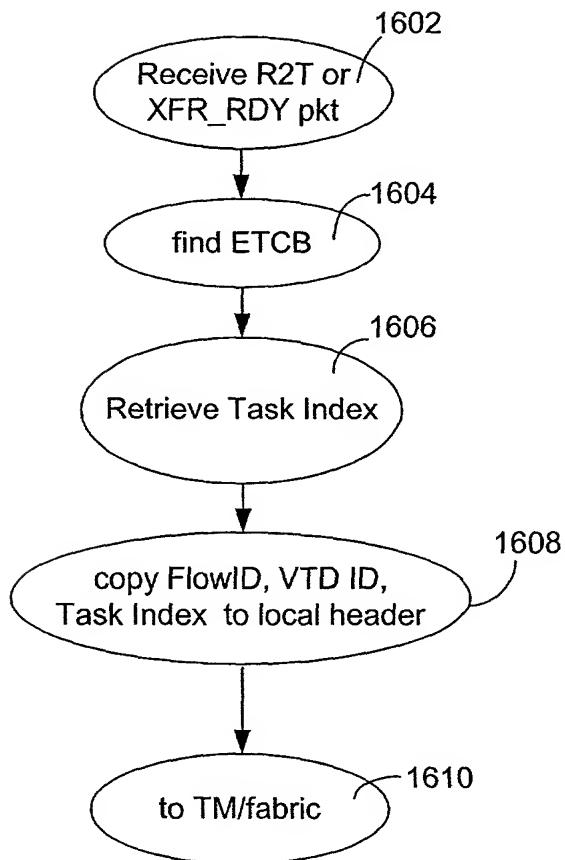


Fig. 16
(Virtualization - Ingress -
R2T/XFR_RDY)

10051164 00166202

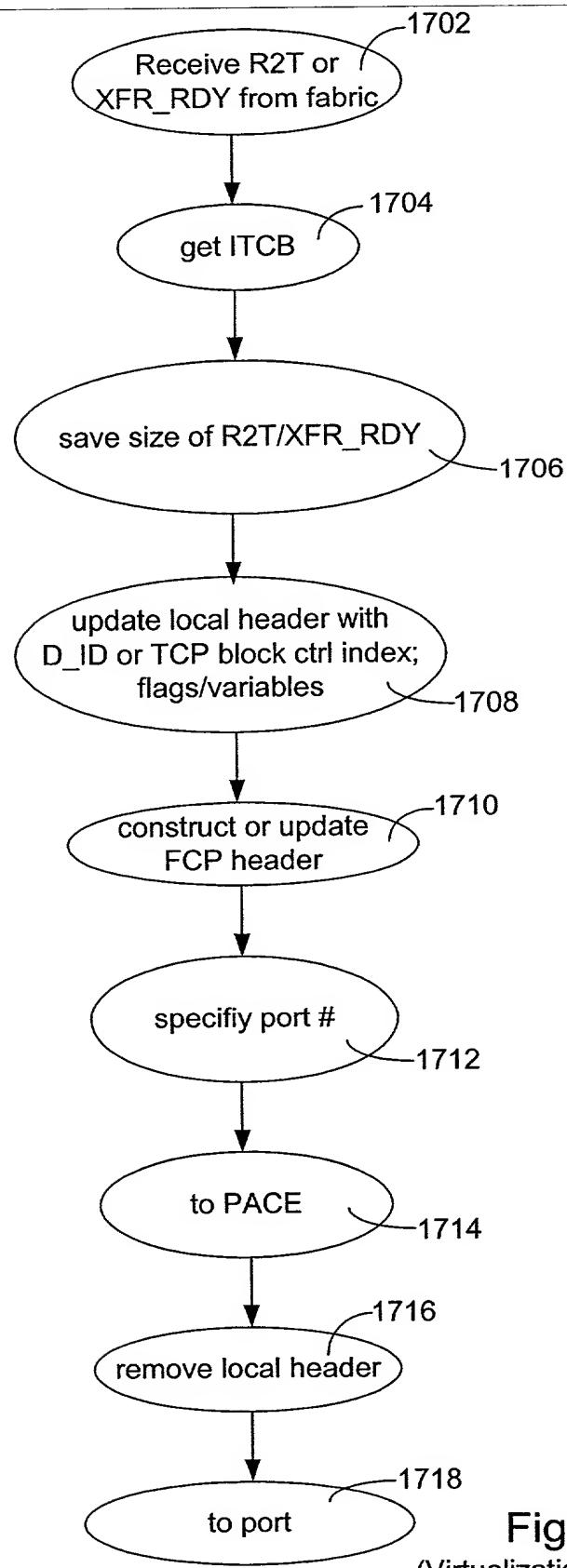
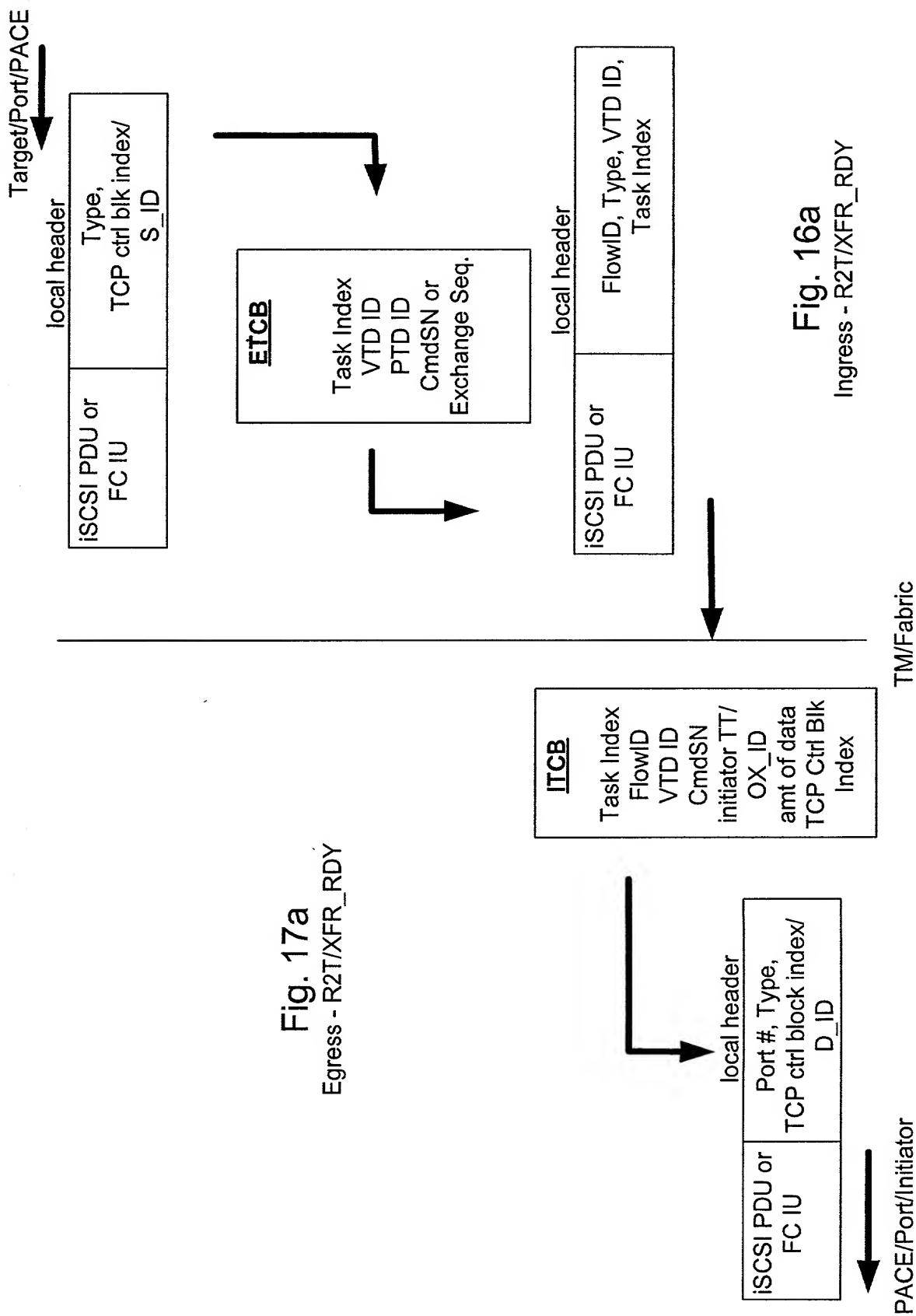


Fig. 17
(Virtualization - Egress -
R2T/XFR_RDY)



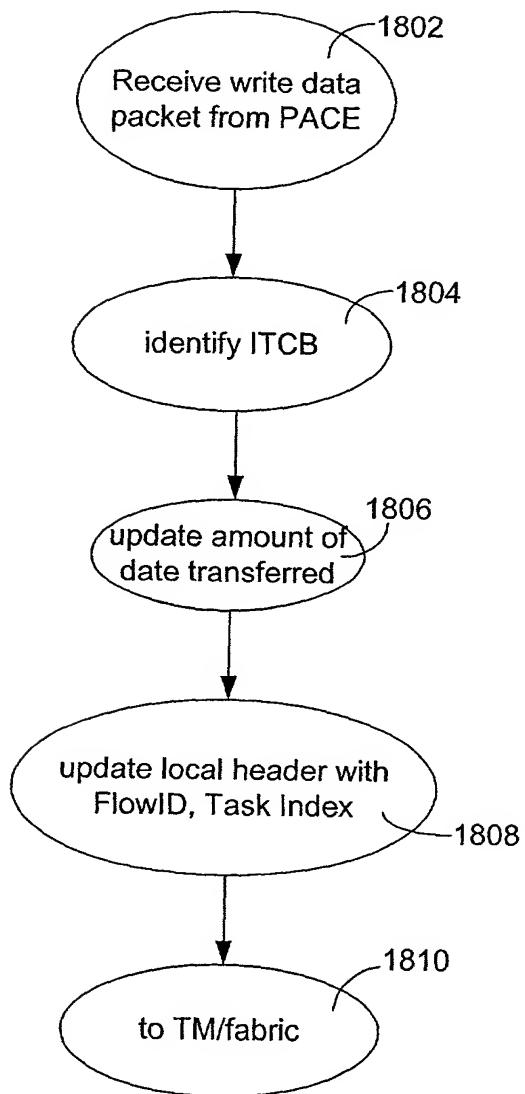


Fig. 18
(Virtualization - Ingress -
write data packet)

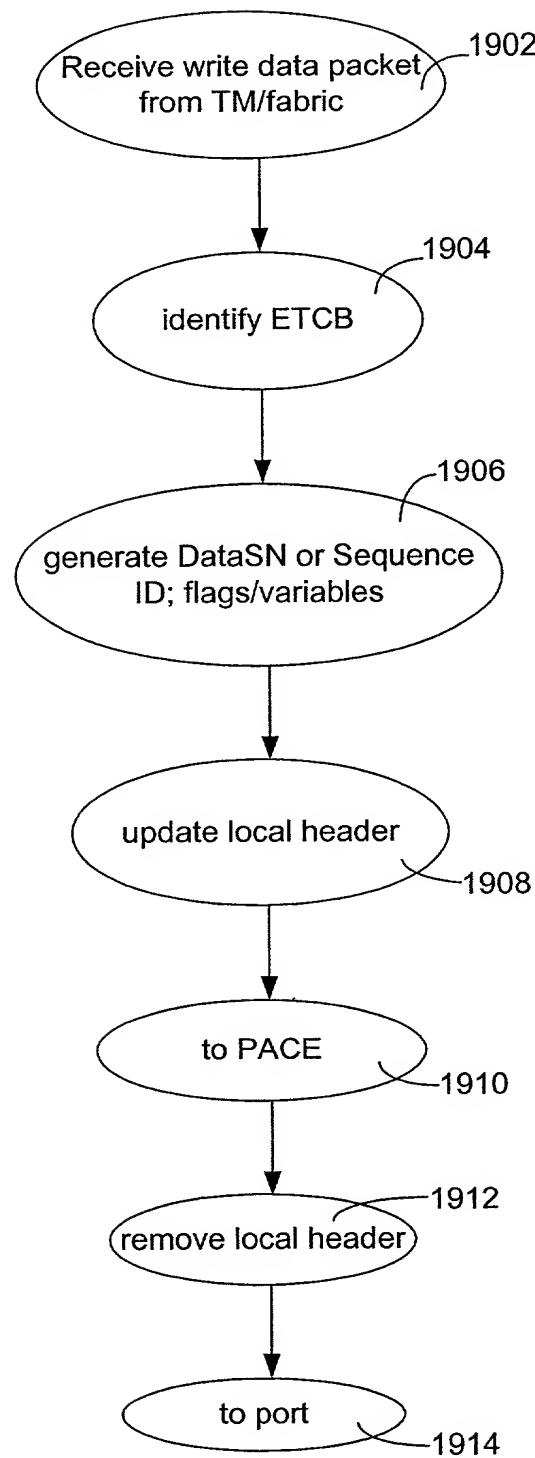
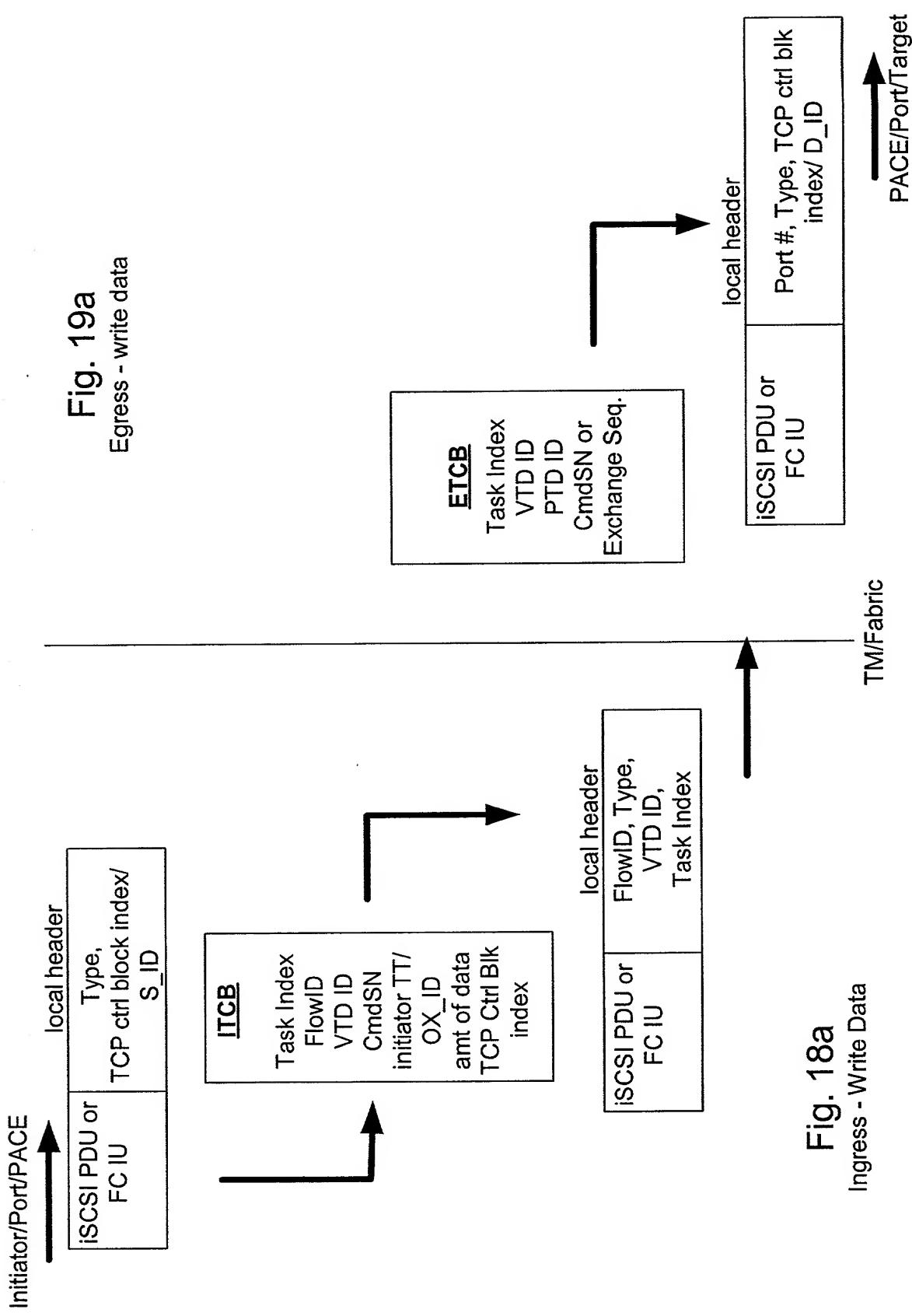


Fig. 19
(Virtualization - Egress -
write data pkt)



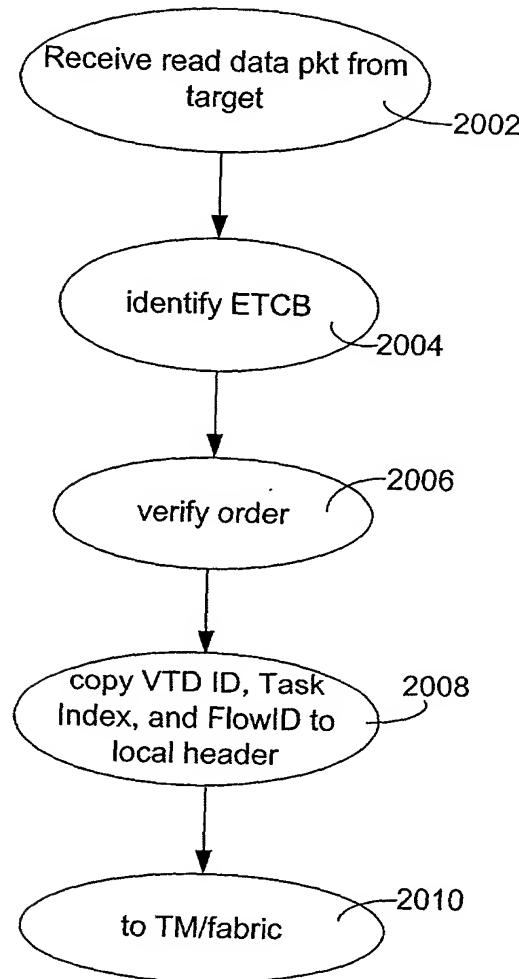


Fig. 20
(Virtualization - Ingress -
Read Data pkt)

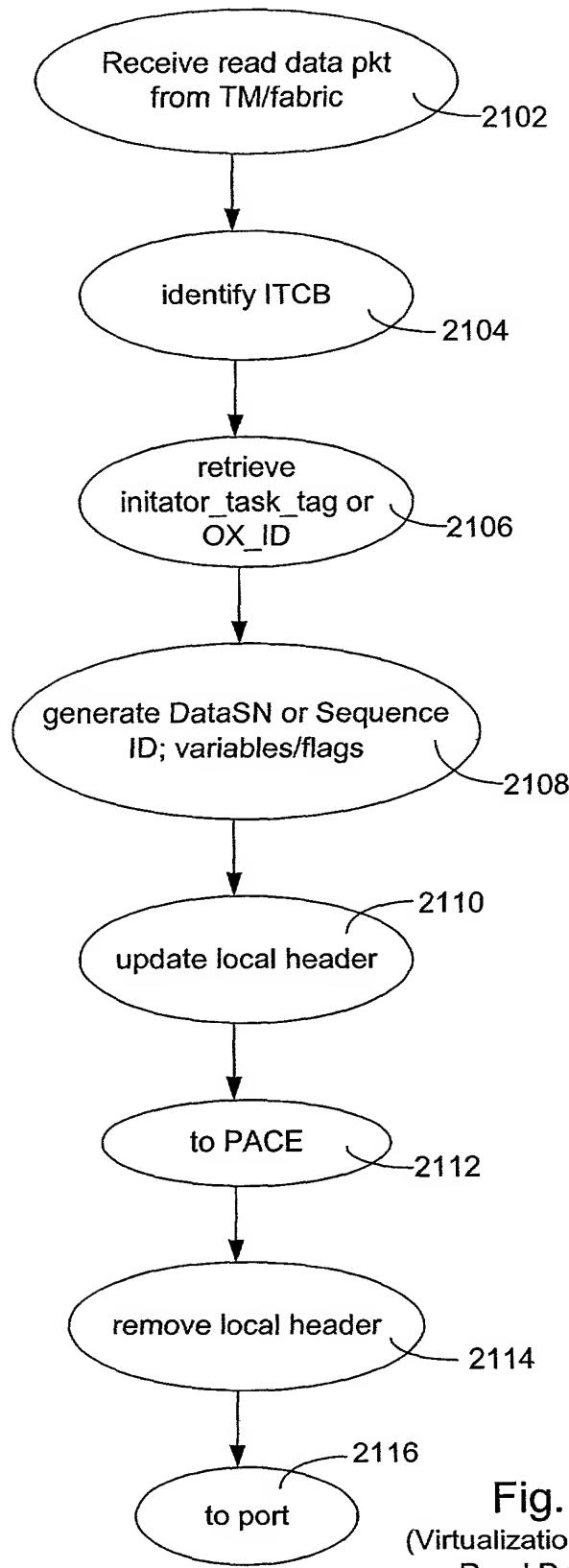
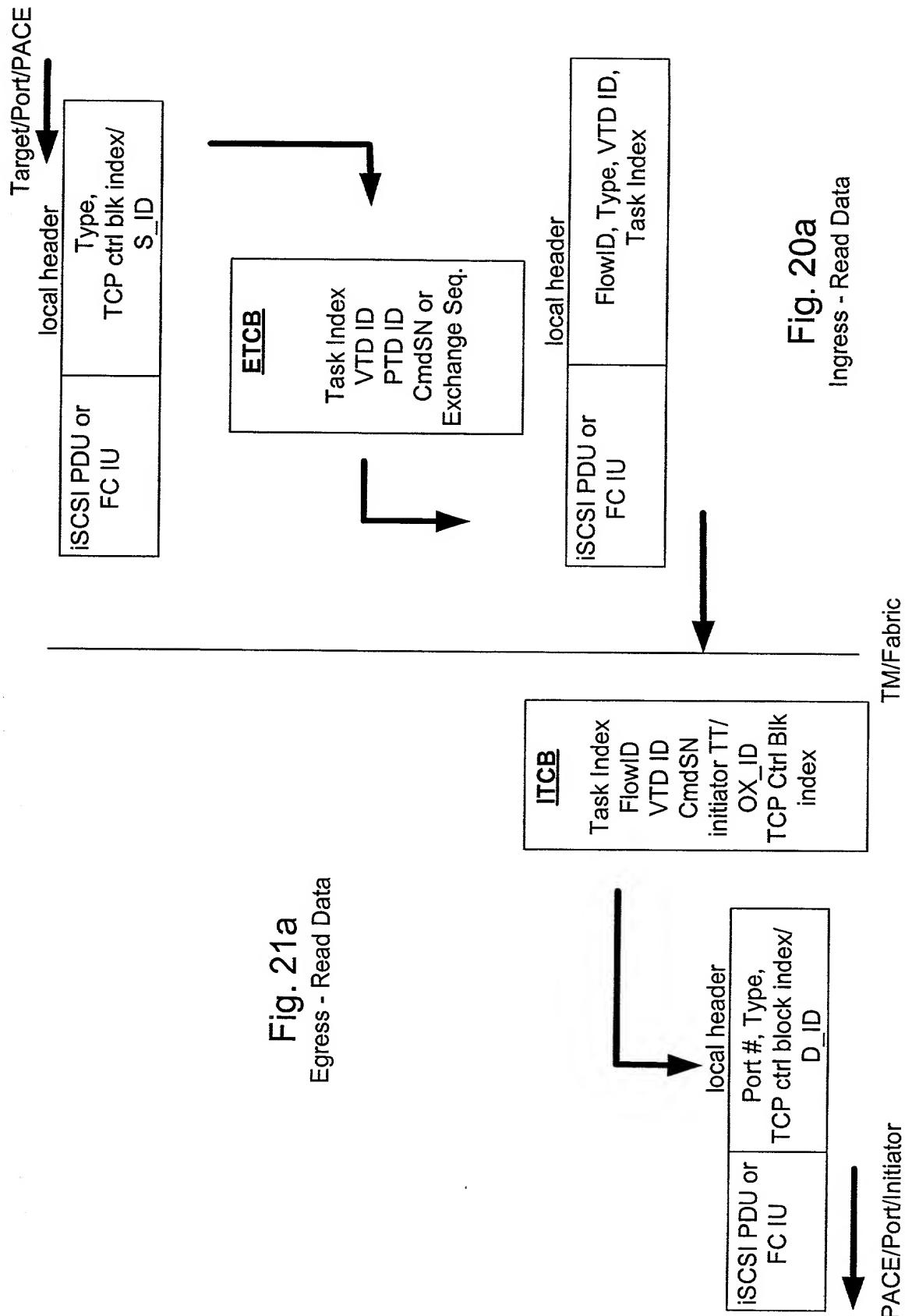


Fig. 21
(Virtualization - Egress-
Read Data pkt)



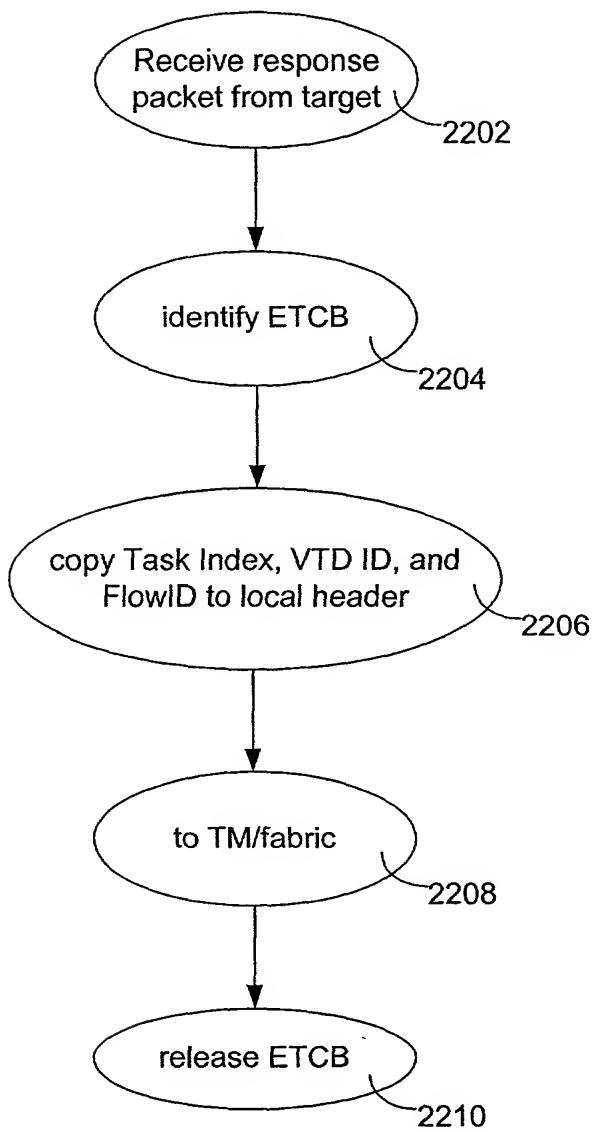


Fig. 22
(Virtualization - Ingress -
response pkt)

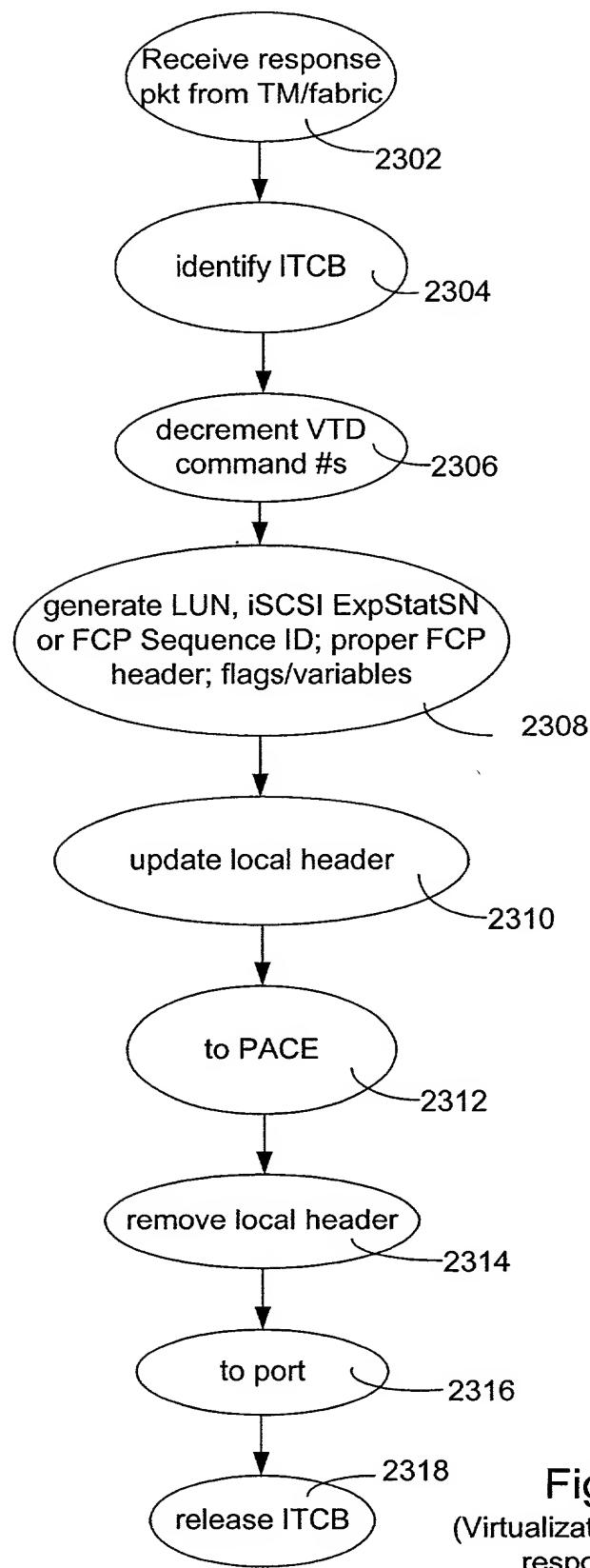
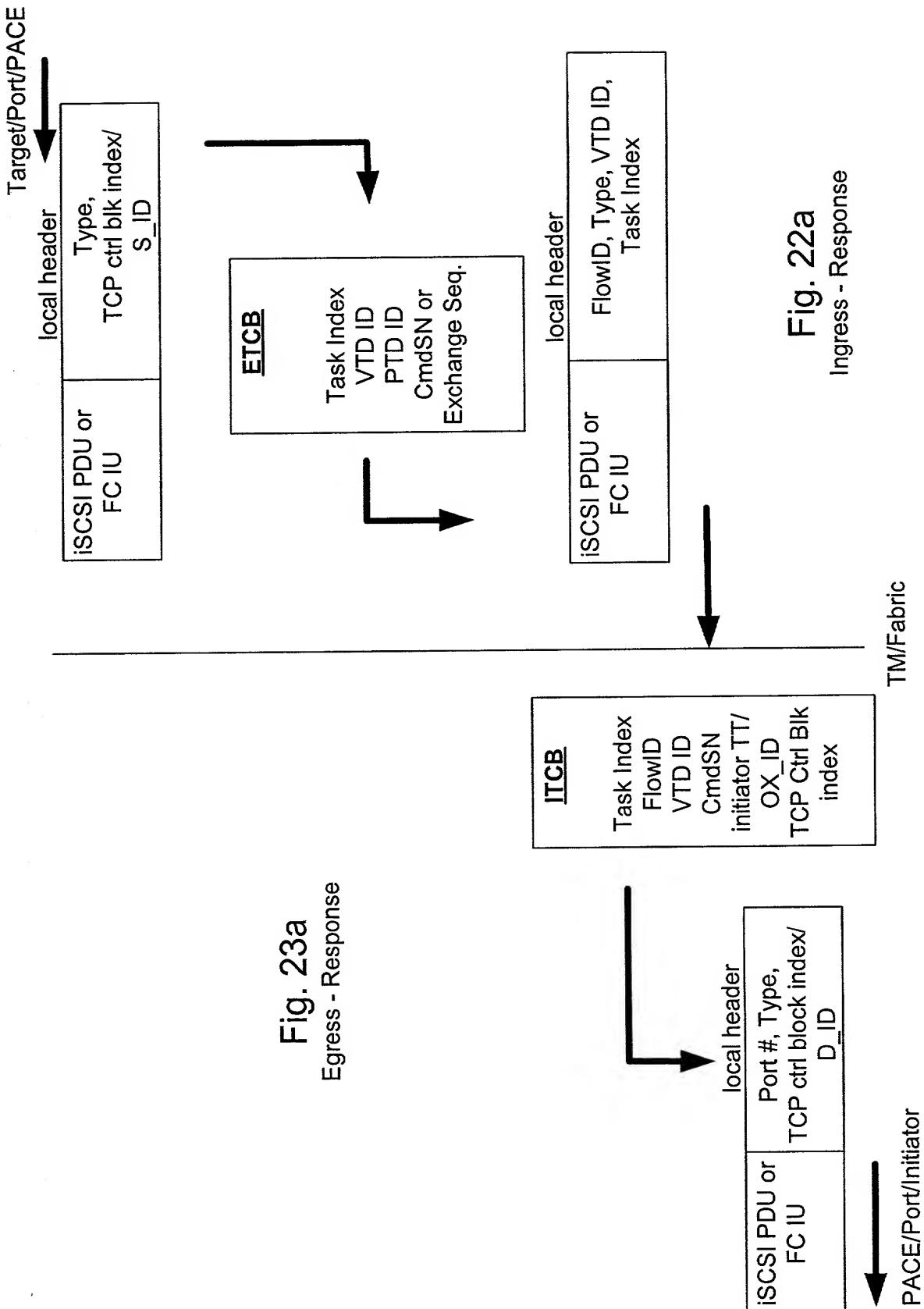


Fig. 23
(Virtualization - Egress -
response pkt)



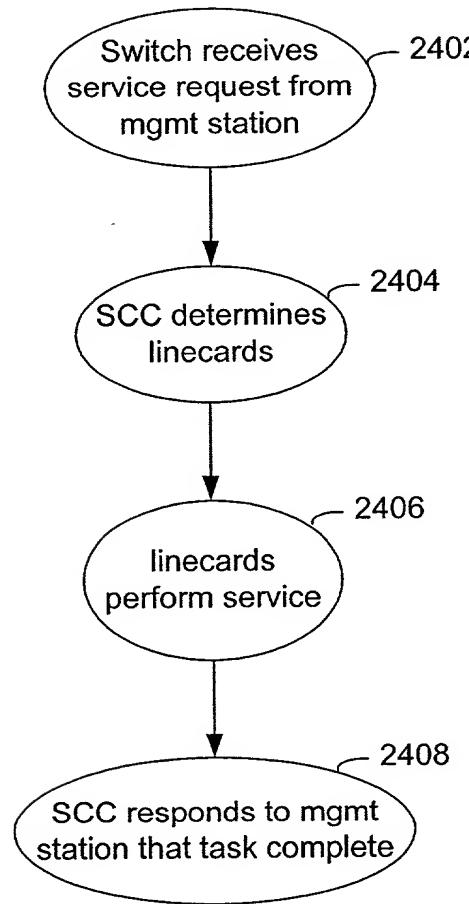


Fig.24

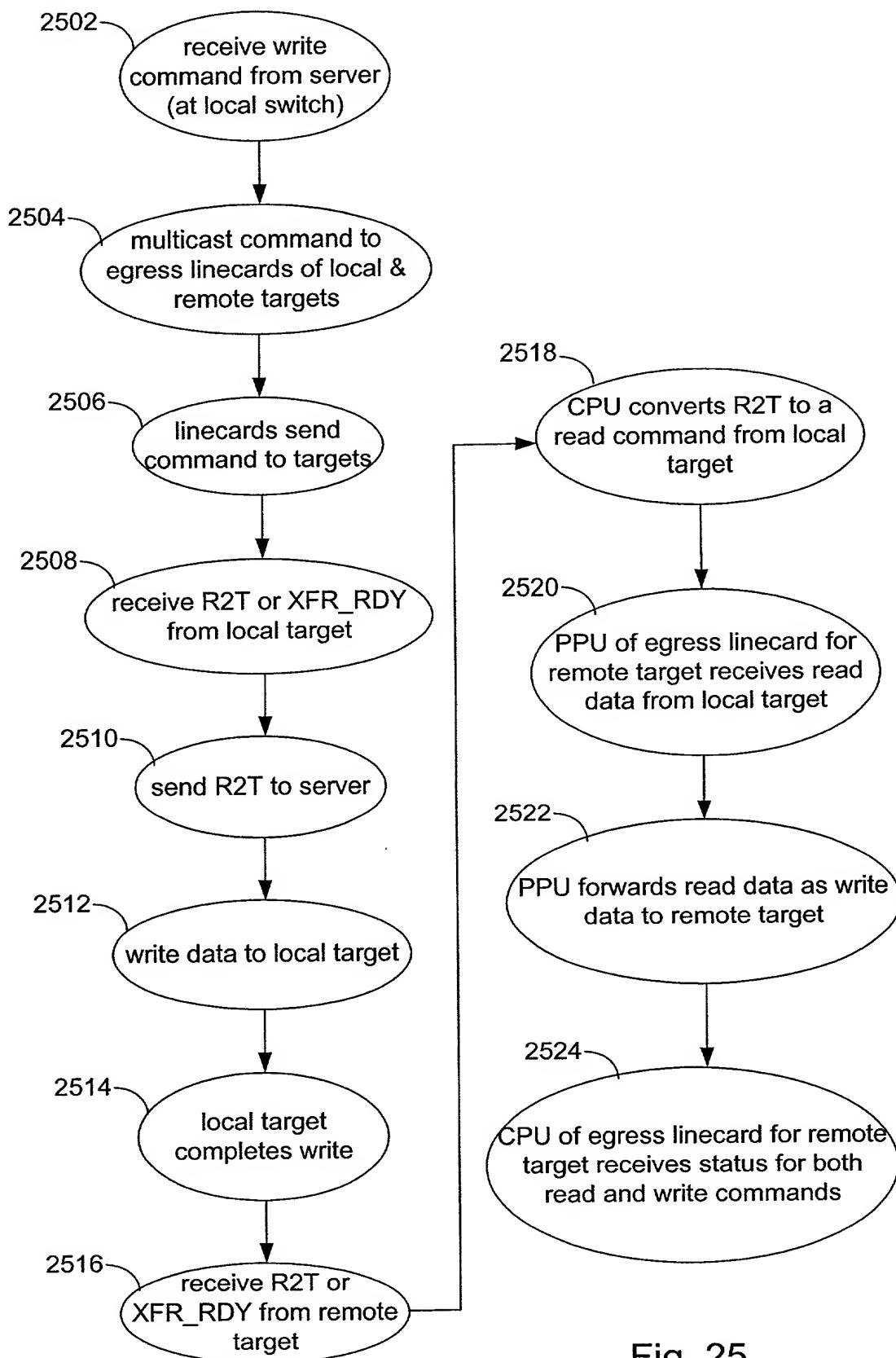


Fig. 25

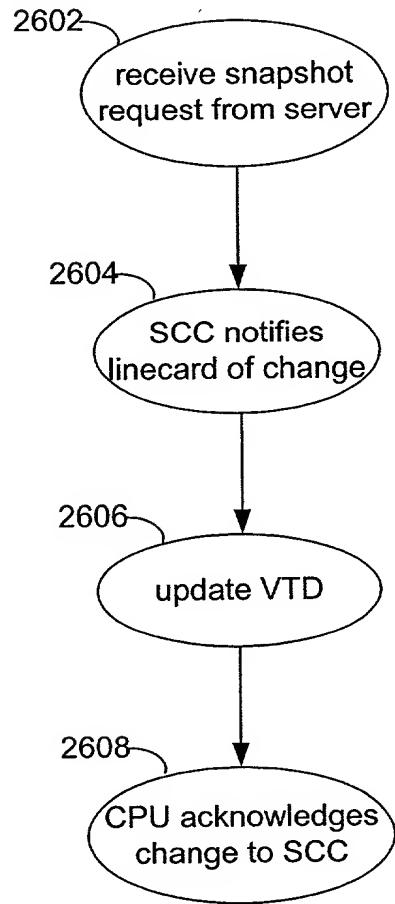


Fig. 26

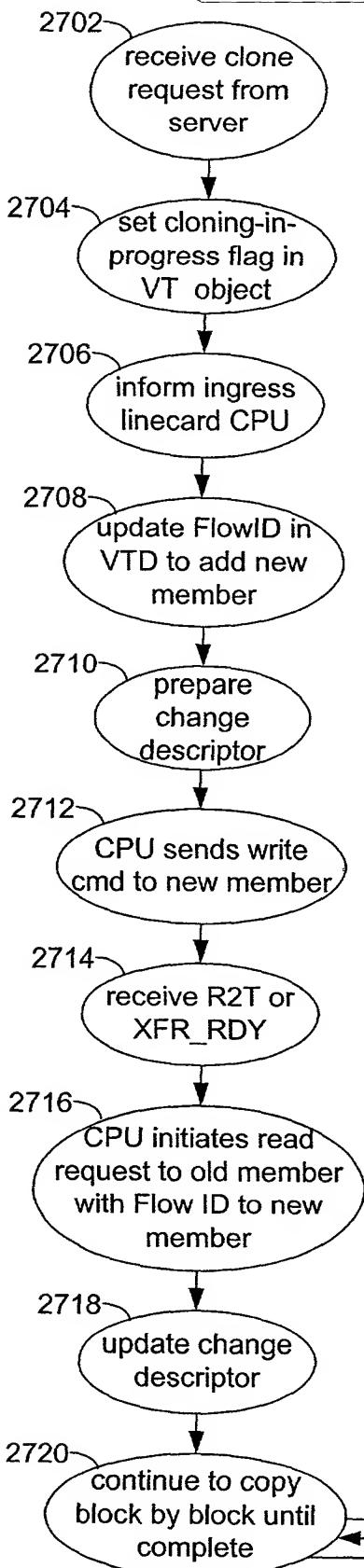
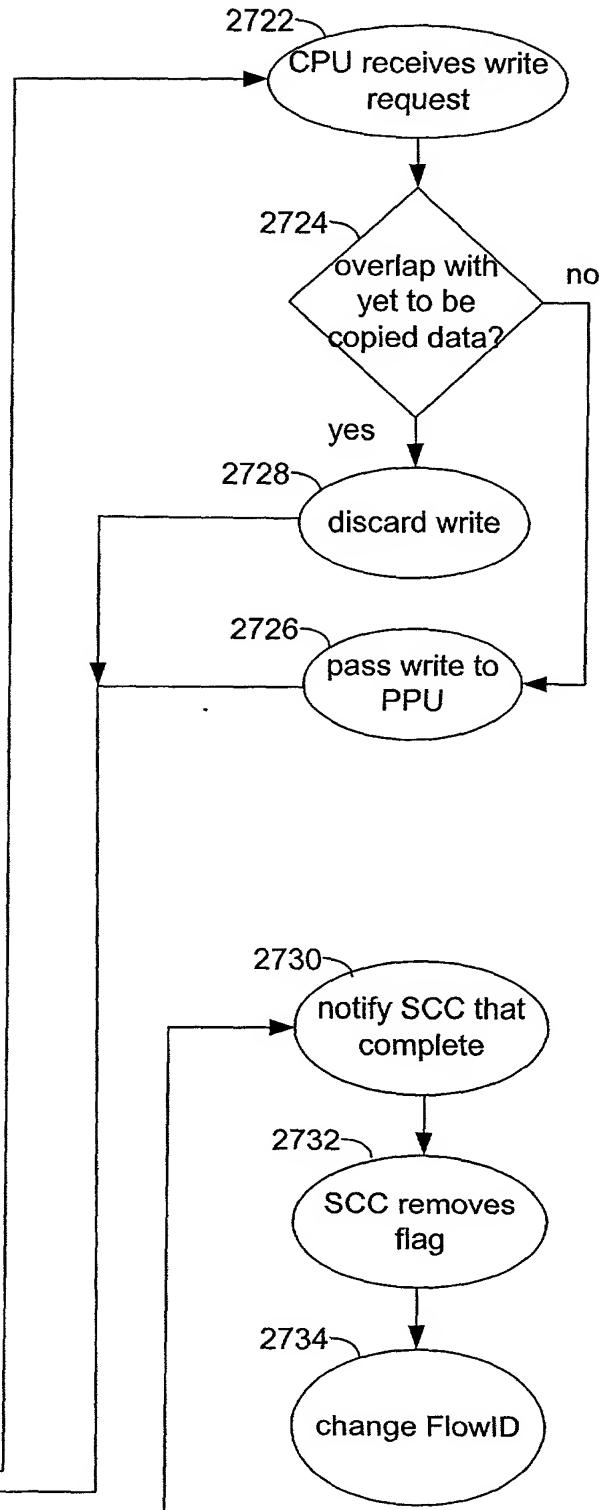


Fig. 27



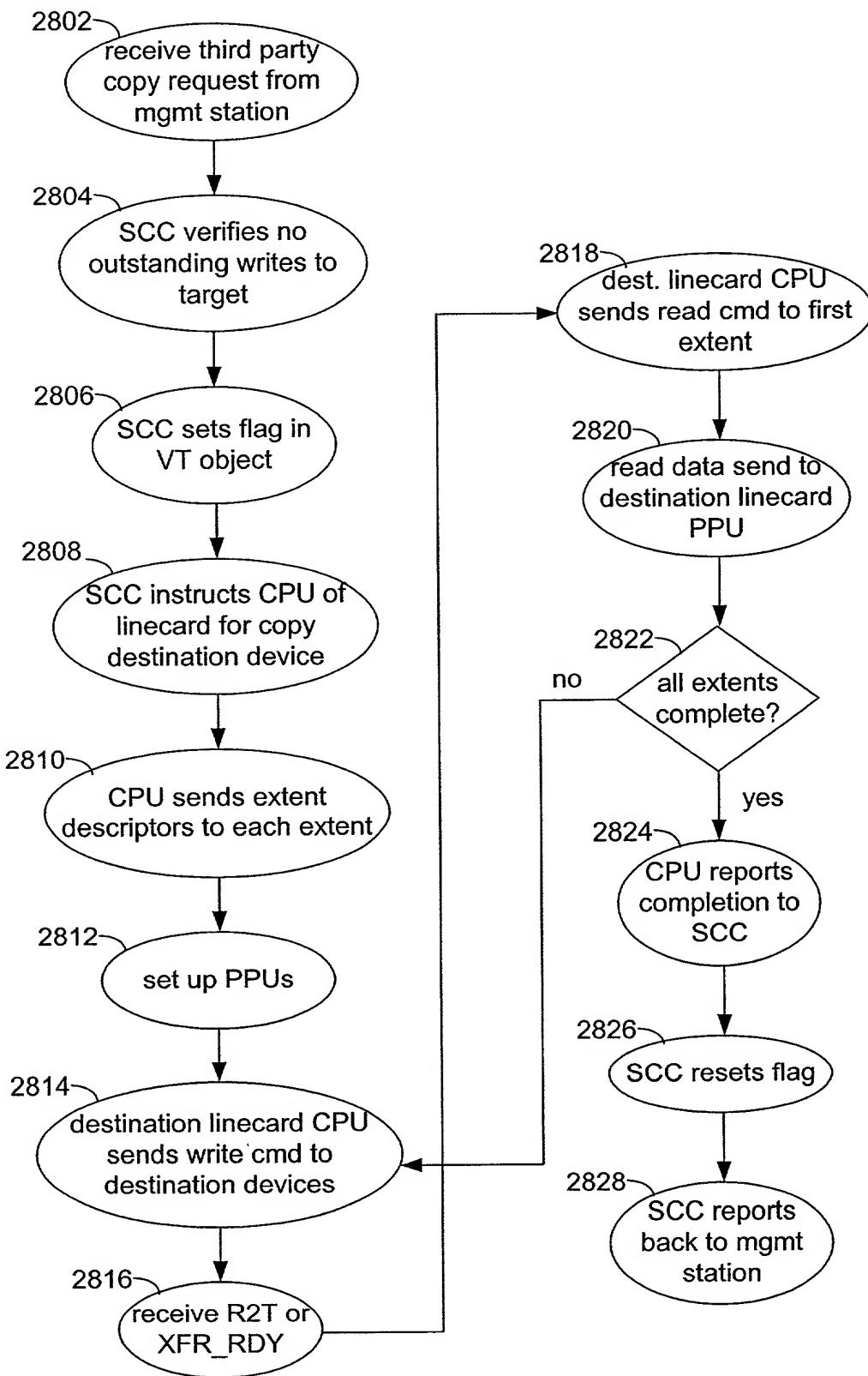


Fig. 28